AMENDMENTS TO THE SPECIFICATION

Please replace paragraph beginning on line 3 of page 3 with the following amended paragraph:

It is known to further modulate the ranging codes using a sub-carrier, that is, a further signal is convolved with the P codes and/or CA codes to create Binary Offset Carrier (BOC) modulation as is known within the art see, for example, J. W. Betz, "*Binary Offset Carrier Modulation for Radionavigation*", Navigation, Vol. 48, pp227-246, Winter 2001-2002. Standard BOC modulation 200 is illustrated in figure 2. Figure 2 illustrates the combination of a portion of a CA code 202 with a subcarrier signal to produce the BOC signal 204 used to modulate a carrier such as, for example, L1. It can be appreciated that the BOC signal is a rectangular square wave and can be represented as, for example, $c_i(t)*\text{sign}(\sin(2\pi f_s t))$, where f_s is the frequency of the subcarrier. One skilled in the art understands that BOC(f_s , f_c) denotes Binary Offset Carrier modulation with a subcarrier frequency of f_s and a code rate (or chipping rate) of f_c. Using binary offset carriers results in the following signal descriptions of the signals emitted from the satellite:

$$S_{L1i}(t) = A_m sc_{im}(t) m_i(t) d_i(t) \cos(\omega_1 t) + A_c sc_{ig}(t) g_i(t) d_i(t) \sin(\omega_1 t) = I_{SL1i}(t) + Q_{SL1i}(t), \text{ and}$$

$$S_{L2i}(t) = B_m sc_{im}(t) m_i(t) d_i(t) \cos(\omega_2 t)$$

where

A_m, A_c and B_m are amplitudes;

$m_i(t)$ is an m-code BOC(10,5) signal;

$g_i(t)$ is a Galileo open service range code;

$sc_{mc}(t)$ represents the sub-carrier signal for $m_i(t)$;

$sc_{ig}(t)$ represents a subcarrier for [[$c_i(t)$;]] $g_i(t)$; and

ω_1 and ω_2 are the L1 and L2 carrier frequencies;